

## CO-CL+



## COMPTIA CLOUD+

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 Days	Introduction	Cloud Computing	Classroom	NA

### INTRODUCTION

The CompTIA Cloud+ certification validates the knowledge and the best practices required of IT practitioners working in cloud computing environments, who must understand and deliver cloud infrastructure. This course covers standard methodology required to securely implement and maintain cloud technologies.

In this course, delegates will apply the skills required to evaluate and implement standard cloud deployments. Delegates will implement, maintain, and deliver cloud technologies including network, storage, and virtualization technologies to create cloud solutions. Students will also manage workload migrations, manage cloud vendors to control costs, use automation and orchestration to bring business value from cloud solutions, and ensure security of cloud implementations through the use of cybersecurity best practices.

The CompTIA Cloud+ certification designates an experienced IT professional as being equipped to provide secure technical solutions to meet business requirements in the cloud.

### AUDIENCE PROFILE

This course is designed for IT professionals who wish to develop cloud computing skills to enable them to move IT workloads to the cloud and integrate products and services from different providers and industries. Their focus is to ensure that cloud deployments are secure, that automation and orchestration are used effectively to bring business value from the cloud, and that costs are controlled through effective management of cloud vendors.

### PREREQUISITES

Before attending this course, delegates should have 24-36 months' experience with IT networking, network storage, and data center administration. Delegates should also have familiarity with any major hypervisor technology for server virtualization, basic knowledge of common cloud service models, and common cloud deployment models.

### COURSE OBJECTIVES

In this course, students will deploy, test, secure, manage, optimize, and troubleshoot a cloud solution. Additionally, after the completion of this course, delegates will be able to:

- Prepare to deploy cloud solutions
- Deploy a pilot project
- Test a pilot project deployment
- Design a secure network for cloud deployment
- Determine CPU and memory sizing for cloud deployments
- Determine storage requirements for cloud deployments
- Plan Identity and Access Management for cloud deployments
- Analyse workload characteristics to ensure successful migration to the cloud
- Secure systems to meet access requirements
- Maintain cloud systems
- Implement backup, restore, and business continuity measures
- Analyse cloud systems for required performance
- Analyse cloud systems for anomalies and growth forecasting
- Troubleshoot deployment, capacity, automation, and orchestration issues
- Troubleshoot connectivity issues
- Troubleshoot security issues

## COURSE CONTENT

### Lesson 1: Preparing to deploy Cloud Solutions

- Describe Interaction of Cloud Components and Services
- Describe Interaction of Non-Cloud Components and Services
- Evaluate Existing Components and Services for Cloud Deployment
- Evaluate Automation and Orchestration Options
- Prepare for Cloud Deployment

### Lesson 2: Deploying a Pilot Project

- Manage Change in a Pilot Project
- Execute Cloud Deployment Workflow
- Complete Post Deployment Configuration

### Lesson 3: Testing Pilot Project Deployments

- Identify Cloud Service Components for Testing
- Test for High Availability and Accessibility
- Perform Deployment Load Testing
- Analyse Test Results

### Lesson 4: Designing a Secure and Compliant Cloud Infrastructure

- Design Cloud Infrastructure or Security
- Determine Organizational Compliance Needs

### Lesson 5: Designing and Implementing a Secure Cloud Environment

- Design Virtual Network for Cloud Deployment
- Determine Network Access Requirements
- Secure Networks for Cloud Interaction
- Manage Cloud Component

- Security
- Implement Security Technologies

### Module 6: Implementing Network Security

- Determine Identity Management and Authentication Technologies
- Plan Account Management
- Policies for the Network and Systems
- Control Access to Cloud Objects
- Provision Accounts

### Module 7: Determining CPU and Memory Sizing for cloud deployments

- Determine CPU Size for Cloud Deployment
- Determine Memory Size for Cloud Deployment

### Lesson 8: Determining Storage Requirements for Cloud Deployments

- Determine Storage Technology Requirements
- Select Storage Options for Deployment
- Determine Storage Access and Provisioning Requirements
- Determine Storage Security Options

### Lesson 9: Analysing Workload Characteristics to Ensure Successful Migration

- Determine the Type of Cloud Deployment to Perform
- Manage Virtual Machine and Container Migration
- Manage Network, Storage and Data Migration

### Lesson 10: Maintaining Cloud Systems

- Patch Cloud Systems
- Design and Implement Automation and

- Orchestration for Maintenance

### Lesson 11: Implementing Backup, Restore, Disaster Recovery, and Business Continuity Measures

- Back Up and Restore Cloud Data
- Implement Disaster Recovery Plans
- Implement Business Continuity Plans

### Lesson 12: Analysing Cloud Systems for Performance

- Monitor Cloud Systems to Measure Performance
- Optimize Cloud Systems to Meet Performance Criteria

### Lesson 13: Analysing Cloud Systems for Anomalies and Growth Forecasting

- Monitor for Anomalies and Resource Needs
- Plan for Capacity
- Create Reports on Cloud System Metrics

### Lesson 14: Troubleshooting Deployment, Capacity, Automation, and Orchestration Issues

- Troubleshoot Deployment Issues
- Troubleshoot Capacity Issues
- Troubleshoot Automation and Orchestration Issues

### Lesson 15: Troubleshooting Connectivity Issues

- Identify Connectivity Issues
- Troubleshoot Connectivity Issues

### Lesson 16: Troubleshooting Security Issues

- Troubleshoot Identity and Access Issues
- Troubleshoot Attacks
- Troubleshoot Other Security Issues

## SKILLS AND COMPETENCIES COVERED



## ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the CompTIA CV0-003 international exam. Successfully passing this exam will result in the attainment of the CompTIA Cloud+ Certification.